

WHAT IS CLAIMS IS

1. A vehicle headlight having a light source to emit light and a reflector for illuminating forward the light emitted from the light source, wherein the reflector is
5 comprising:

a plurality of movable mirrors to be operated independently and optionally and a fixed mirror disposed outside these movable mirrors, whereby the light emitted from the light source to the movable mirrors are not
10 blocked mutually.

2. A vehicle headlight according to Claim 1; wherein the movable mirrors are operated in a direction of two axes at right angles to each other.

3. A vehicle headlight according to Claim 2; wherein
15 the movable mirror is comprising a mirror member, first beam connecting the mirror member, a frame positioned so as to surround the mirror member, second beam connecting the frame and a mirror base plate placed outside the frame, wherein the first and second beams work as rotational axes
20 of the mirror member at right angles to each other, and the frame, beams and mirror base plate reflect the light emitted from the light source, respectively.

4. A vehicle headlight according to Claim 3; wherein
25 back side of the movable mirror is formed out of either a soft magnetic material, a permanent magnet or a coil, and a plurality of stator coil positioned facing the back side of the movable mirror, and magnetic force between the

movable mirror and the stator coil is controlled so as to operate the movable mirror with an optional angle in the direction of two axes at right angles to each other.

5 5. A vehicle headlight according to Claim 4; wherein the movable mirror is operated to optionally alter a distribution of light illuminated from the vehicle headlight.

10 6. A vehicle headlight according to Claim 5; wherein a high-intensity discharge lamp is used for the light source, and the movable mirror is operated to control light illuminated from the vehicle headlight.

15 7. A vehicle headlight according to Claims 5, wherein a part of plurality of movable mirrors have a function of transmitting visible light emitted from the light source and reflecting infrared light emitted from the light source, and further comprising an electric circuit for controlling the part of plurality of the movable mirrors independently of other part of plurality of movable mirrors.

20 8. A vehicle headlight according to Claims 1 to 7; further comprising a sensor for detecting a situation surrounding the vehicle and other sensor for detecting an operational condition of the vehicle, wherein a distribution of the light illuminated from the vehicle
25 headlight is controlled with optimal to the situation surrounding the vehicle and to the operational condition of the vehicle based on the output of these sensors.

9. A vehicle operation support apparatus with a vehicle headlight having a light source to emit light and a reflector for illuminating forward the light emitted from the light source, wherein the reflector is comprising:

a plurality of movable mirrors to be operated independently and optionally and a fixed mirror disposed outside these movable mirrors, whereby the light emitted from the light source to the movable mirrors is not blocked mutually.